

### 3.4.2

## LOCAL HAZARD MITIGATION GOALS

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To kick-off the process of setting goals and objectives, the Project Staff requested the stakeholders have the first word on Louisville's potential to mitigate hazards. In order to understand the comprehensive nature of the agencies involved and to educate others about the mitigation projects and programs already in place, the Project Staff asked each member agency /organization to give an overview of their programs and projects. As a result, participants made 17 presentations during two Committee meetings. The presentations gave each member of the Plan Development Team a sense of the types of mitigation projects currently implemented and set the stage for partnerships. Moreover, members left the meetings with a better understanding of what Louisville Metro is capable of and a vision for projects and programs for Louisville Metro.

Following is a list including the name of the agency and the presenter.

### **Presentations from Local Agency/Organizations for Mitigation Capabilities**

**February 8 and 15, 2005**

<u>AGENCY/ORGANIZATION</u>	<u>PRESENTERS</u>
National Weather Service (NWS)	John Gordon
Louisville Metro Health Dept.	Bill Wetter
Army Corps of Engineers	Richard Pruitt
US Geological Survey (USGS)	Mike Griffin
Jefferson County Public Schools	Chuck Fleischer
LOJIC	Curt Bynum
Louisville Metro EMA	Doug Hamilton, Mike Brown & Jim McKinney
American Red Cross	George Betz
Louisville Metro Public Works	Rick Storm
MSD	Randy Stambaugh, & Vince Bowlin
Louisville Metro Parks	Bill Herron/ Katie Moss
Louisville Water Company	Glen Mudd
Suburban Fire Districts	Michael Willett
U of L, Center for Hazards Research	Josh Human

### **Developing Local Hazard Mitigation Goals:**

During the February 15 meeting, the Planning Team and Advisory Committee received a series of "hazard fact sheets" for each hazard (see Appendix 16). The fact sheets were used to help determine the best goals, objectives, mitigation programs, and projects for the Action Plan. See Appendix 16 to review the

hazard fact sheets. In addition to the presentation, the hazard fact sheets provided the Planning Team and Advisory Committee with tools to make wise decisions for mitigation projects.

**Brainstorming Session for an Action Plan:** During the March 2, 2005 meeting, the Planning Team and Advisory Committee began to brainstorm a series of general problems, concerns, and specific activities to mitigate the hazards. Committee members reviewed the hazard fact sheets, analyzed the loss estimates in the risk assessment, and brainstormed ideas to mitigate the hazards to reduce or avoid long-term vulnerabilities. The following summary of the brainstorming session gave the Project Staff the vehicle needed to draft initial goals and to draft activities and projects for an action plan.

**General Concerns:**

- Lack of data causing gaps in potential to model a hazard
- Community has not learned from past lessons regarding flooding along the river
- Review Siren systems and detail any need for expansion and maintenance
- Lack of Hazard Identification Education
- Promote NWS Education
- Concern for how will Plan continue after All Hazard Grant is complete
- Loss of Power- LGE plans and community expectations
- Develop Public Education and encourage Public responsibility
- Promote Health preparedness
- Combine planning efforts, committees, and community organizations active in disasters with Weapons of Mass Destruction training.
- Expand Red Cross Disaster Preparedness Kit – Pizometer. Include Local Emergency Planning Committee (LEPC) all hazards brochure in kit

**Summary of Problems and Potential Mitigation Actions**

**Dam & Levee Failure:**

- Seek more data for dams
- Attain better GIS location data for existing state dams
- Ensure all Class C dams have an Emergency Operations Plan (EOP)
- Review existing dams and determine if classifications are out-of-date
- Consider requiring EOP for Class B dams
- Require dam owner to maintain EOP and annual drills
- Develop a local definition for dams that do not fit the state's definition of a dam
- Develop a local inventory of dams by locating all local dams.
- Metro Parks staff determining local dam sites in parks, will submit data to LOJIC
- Place a benchmark or similar point on dams to help determine if movement is occurring

- Post a sign/landmark on dams with classification type (A, B, or C), a description of materials, and the potential for movement
- Evaluate damage to levee and flood protection system
- Develop better local dam construction and inspections criterion

#### **Drought:**

Need a central local agency or avenue to report and receive info for

#### **Earthquake:**

- Seek more data
- Need better soils data, especially for downtown/urban area, to determine potential liquefaction
- Need year built , type of foundation, and building construction type
- Outreach on existing fault lines

#### **Extreme Heat:**

Need a central local agency or mechanism to report and receive info for extreme heat

#### **Flood:**

- Enforce Floodplain Ordinance for repetitive loss
- *Code Plus* – Pre and Post Flow – Requires Stricter Rules
- Review and update High Water Emergency Plans
- Review and update FWEEPS and make available
- Review Flood Warning Gauges and effectiveness
- Target public buildings damaged by flood

#### **Hailstorm**

#### **Karst/Sinkholes**

- Need a central local agency or avenue to report and receive info for karst/sinkhole
- Consider hazard disclosure laws
- Review all codes for karst regulations
- Further develop soils and building data info from karst census tracks and then target areas

#### **Landslide**

- Need a central local agency or avenue to report and receive info for landslide
- Enforce Binding Elements on development
- Consider hazard disclosure laws
- Further develop soils and building data info from landslide census tracks and target areas

**Severe Thunderstorm and Lightning**

- Loss of Power- LGE plans and community expectations
- LGE has an Outage Management System
- LGE developing a Vegetation Management Program
- Metro Parks and other government agencies are participating in developing a community-wide Tree Ordinance.

**Severe Winter Storm**

- Loss of Power- LGE plans and community expectations
- LGE has an Outage Management System
- LGE developing a Vegetation Management Program
- Metro Parks and other government agencies are participating in developing a community-wide Tree Ordinance.

**Tornado**

- Manufactured housing a major concern
- Need Safe Place designated in Manufactured Housing parks
- Encourage new construction to include a safe room
- Require hurricane clips through the State Building Code
- Require structure's foundation is secure
- Loss of Power- LGE plans and community expectations
- LGE has an Outage Management System
- LGE developing a Vegetation Management Program
- Metro Parks and other government agencies are participating in developing a community-wide Tree Ordinance.

**Wildfire:**

- Seek more data and a standard for reporting grass, wild fire, etc....
- Metro Parks and other government agencies are participating in developing a community-wide Tree Ordinance.

## Louisville Metro All Hazards Mitigation Goals and Objectives

A summary of the March 2, 2005 Planning Team and Advisory Committee Brainstorming Session assisted Project Staff in drafting a list of goals, objectives, and possible mitigation actions. During the March 30, 2005 meeting, Project Staff presented the draft goals, objectives, and actions to the Planning Team and Advisory Committee and they further refined the mitigation plan. All agreed to accept the following goals and objectives and to move to the next step for refining the Action Plan (see Section 3.4.3 Identification and Analysis of Mitigation Measures).

**Mitigation Goals** are designed to be general guidelines of what is to be achieved. These goals are for long-term and represent the overall vision of the mitigation plan.

The **Objectives** define the strategies and implementation steps to attain the identified goals. These objectives are specific, measurable, and have a defined completion.

*Goal 1—Minimize the loss of life and injuries that could be caused by natural hazards.*

- Objective 1.1—Promote the use of early-warning systems to alert people of severe weather, such as thunderstorms, floods, and tornadoes.
- Objective 1.2—Encourage the development or amendment of laws so they may more effectively address hazard mitigation.
- Objective 1.3—Ensure building codes addressing the construction of engineered and residential structures are properly enforced.
- Objective 1.4—Improve the safety of high-hazard dams to minimize the threat to people and structures that would be impacted by their failure.
- Objective 1.5—Make existing manufactured housing more resistant to movement from their sites by high winds and swift floodwaters.
- Objective 1.6—Promote the installation of tornado safe rooms in homes and construction of community tornado shelters.
- Objective 1.7—Reduce repetitive losses, especially those caused by flooding.
- Objective 1.8—Continue to conduct studies assessing flood hazards and risks.

*Goal 2—Facilitate a sustainable economy by protecting agriculture, business, and other economic activities from natural hazards.*

- Objective 2.1—Reduce the vulnerabilities of Louisville Metro owned facilities and infrastructure to natural hazards.

- Objective 2.2—Reduce the vulnerability of Louisville Metro’s structures and infrastructure to the effects of geologic hazards including landslides, earthquakes, and sinkhole collapse.
- Objective 2.3—Provide incentives for mitigation planning and actions.
- Objective 2.4—Support efforts that will assist with the continuity of critical business operations.
- Objective 2.5—Develop hazard mitigation policies that promote the protection of the environment.
- Objective 2.5—Direct urban growth away from flood hazard areas.

*Goal 3—Facilitate the strengthening of public emergency services, its infrastructure, facilities, equipment, and personnel to natural hazards.*

- Objective 3.1—Integrate the local pre- and post disaster mitigation functions with the response and recovery functions of the state.
- Objective 3.1—Assist where possible to include mitigation activity in emergency responder training.

*Goal 4—Develop a community-wide mitigation effort by building stronger partnerships between government, businesses, and the general public.*

- Objective 4.1—Form partnerships to leverage and share resources.
- Objective 4.2—Annually review existing local agency programs, plans, and policies to determine their effectiveness and efficiency in reducing risk and vulnerabilities to natural hazards.

*Goal 5—Increase public and private understanding of natural hazard mitigation through the promotion of mitigation education and awareness of natural hazards.*

- Objective 5.1—Disseminate useful information about Louisville Metro’s geologic hazards to the general public and development professionals in order to assist in safe, appropriate development, particularly in hazard areas.
- Objective 5.2—Improve public knowledge of hazards and protective measures so individuals can appropriately respond during hazard events.

- Objective 5.3—As resources allow, develop, and promote outreach strategies designed to educate residents about local hazards, their associated risk and vulnerabilities, and the applicable mitigation actions.
- Objective 5.4—Identify and encourage the incorporation of available hazard mitigation education and outreach programs/products into school education programs.
- Objective 5.5—As resources allow, maintain an ongoing education and outreach effort to educate local officials about the importance of hazard mitigation.
- Objective 5.6—As resources permit, develop a public awareness campaign on the benefits of pre- and post-disaster mitigation.
- Objective 5.7—Develop a strategy for working with the print, electronic and broadcast media to disseminate mitigation education and outreach material.

*Goal 6—Enhance existing or design new policies and technical capabilities that will reduce the effects of natural hazards.*

- Objective 6.1—Increase the community's involvement in the Community Rating System (CRS) program. This will promote better floodplain management while offering the incentive of lower flood insurance premiums.
- Objective 6.2—Promote the gathering and archiving of local data on the types and amount of damages after a natural hazard event.
- Objective 6.3—Support the development and use of disaster loss reduction related building codes and standards designed to reduce vulnerability and risk to all hazards.

*Goal 7—Enhance existing technical and GIS data and capabilities that will reduce the effects of natural hazards.*

Objective 7.1—Improve hazard information, including databases and maps.

Objective 7.2—Review and recommend annual updates of the risk and vulnerability assessments of Louisville Metro's Hazard Mitigation Plan.